Amendments to the Claims:

Please amend Claims 17 and 25, and cancel Claims 14, 22, and 30, as shown below. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1– 8.   (Canceled)

9.   (Previously Presented) A receiver unit in a multiple-input multiple-output (MIMO) communication system, comprising:

at least one front end processor configured to receive at least one signal received via different spatial channels;

a MIMO processor coupled to the at least one front end processor and configured to provide estimates of at least some symbols in the at least one signal; and

a channel quality estimator coupled to the MIMO processor and configured to estimate characteristics of a plurality of transmission channels used for data transmission and to provide signal-to-noise and interference (SNR) information for one or more of the different spatial channels; and

a transmit data processor configured to receive and process the SNR information for transmission.

10.   (Previously Presented) The receiver unit of claim 9, wherein the channel quality estimator is configured to provide the SNR information for each subcarrier of an Orthogonal Frequency Division Multiplexed (OFDM) signal received at the receiver based upon an average of SNR information over all of the different spatial channels.

11.   (Previously Presented) The receiver unit of claim 9, wherein the channel quality estimator is configured to provide the SNR information based upon an average of SNR information over a plurality of subcarriers of an Orthogonal Frequency Division Multiplexed (OFDM) signal received at the receiver.

12.   (Previously Presented) The receiver unit of claim 9, wherein the channel quality

estimator is configured to provide the SNR information based upon an average of SNR information over all of the different spatial channels.

13.   (Previously Presented) The receiver unit of claim 9, wherein the channel quality estimator is configured to provide the SNR information based upon an average of SNR information for pilot signals received over all of the different spatial channels.

14.   **(Canceled)**

15.   (Previously Presented) The receiver unit of claim 9, wherein the channel quality estimator is configured to provide the SNR information based on a correlation matrix inversion (CCMI) processing.

16.   (Previously Presented) The receiver unit of claim 9, wherein the channel quality estimator is configured to provide the SNR information based minimum mean square error (MMSE) processing.

17.   **(Currently Amended)** A receiver unit in a multiple-input multiple-output (MIMO) communication system, comprising:

    means for receiving at least one signal received via different spatial channels;

    means for providing estimates of at least some symbols in the at least one signal; [[and]]

    means for estimating characteristics of a plurality of transmission channels used for data transmission;

    means for providing signal-to-noise and interference (SNR) information for one or more of the different spatial channels; and

    a transmit data processor configured to receive and process the SNR information for transmission.

18.   (Previously Presented) The receiver unit of claim 17, wherein the means for providing SNR information comprises means for providing SNR information for each subcarrier of an Orthogonal Frequency Division Multiplexed (OFDM) signal received at the receiver based upon an average of SNR information over all of the different spatial channels.

19.   (Previously Presented) The receiver unit of claim 17, wherein the means for providing SNR information comprises means for providing SNR information based upon an average of SNR information over a plurality of subcarriers of an Orthogonal Frequency Division Multiplexed (OFDM) signal received at the receiver.

20.   (Previously Presented) The receiver unit of claim 17, wherein the means for providing SNR information comprises means for providing SNR information based upon an average of SNR information over all of the different spatial channels.

21.   (Previously Presented) The receiver unit of claim 17, wherein the means for providing SNR information comprises means for providing SNR information based upon an average of SNR information for pilot signals received over all of the different spatial channels.

22.   **(Canceled)**

23.   (Previously Presented) The receiver unit of claim 17, wherein the means for providing SNR information comprises means for providing SNR information based on a correlation matrix inversion (CCMI) processing.

24.   (Previously Presented) The receiver unit of claim 17, the means for providing SNR information comprises means for providing SNR information based minimum mean square error (MMSE) processing.

25.   **(Currently Amended**) A method for providing signal-to-noise and interference (SNR) for feedback in a wireless communication system, comprising:

        receiving at least one signal received via different spatial channels;

        providing estimates of at least some symbols in the at least one signal; [[and]]

        estimating characteristics of a plurality of transmission channels used for data transmission;

        providing signal-to-noise and interference (SNR) information for one or more of the different spatial channels; and

        processing the SNR information for transmission.

26.   (Previously Presented) The method of claim 25, wherein providing SNR information comprises providing SNR information for each subcarrier of an Orthogonal Frequency Division Multiplexed (OFDM) signal received at the receiver based upon an average of SNR information over all of the different spatial channels.

27.   (Previously Presented) The method of claim 25, wherein providing SNR information comprises providing SNR information based upon an average of SNR information over a plurality of subcarriers of an Orthogonal Frequency Division Multiplexed (OFDM) signal received at the receiver.

28.   (Previously Presented) The method of claim 25, wherein providing SNR information comprises providing SNR information based upon an average of SNR information over all of the different spatial channels.

29.   (Previously Presented) The method of claim 25, wherein providing SNR information comprises providing SNR information based upon an average of SNR information for pilot signals received over all of the different spatial channels.

30.   **(Canceled)**

31.   (Previously Presented) The method of claim 25, wherein providing SNR information comprises providing SNR information based on a correlation matrix inversion (CCMI) processing.

32.   (Previously Presented) The method of claim 25, wherein providing SNR information comprises providing SNR information based minimum mean square error (MMSE) processing.